

**REMARKS****Status of the Claims**

Claims 43-79 are pending. Claims 44, 45, 48-50, 54, 57-64, 70-71 and 76 are withdrawn. Accordingly, claims 43, 46-47, 51-52, 55-56, 65-69, 72-75, and 77-79 are pending and under consideration.

**Claim Numbering**

Applicants are submitting herewith a new claim set, wherein the claims have been renumbered to bring the pending claims in compliance with 37 CFR 1.121.

**Species Election Requirement**

In response to the Species Election Requirement, Applicants elect:

- (1) a method of forming a library where step (a) includes enriching at least one organism marker;
- (2) a method where step (c) includes enriching for at least one nucleic acid marker; and
- (3) a method where step (b) includes isolating genomic DNA.

Further, the currently pending claims which encompass these elected species are 43, 46, 47, 51-52, 55-56, 65-69, 72-75, and 77-79.

Applicants respectfully request that, upon allowance of generic claim 43, the Examiner consider withdrawn claims 44, 45, 48-50, 54, 57-64, 70-71 and 76, directed to the non-elected species, as provided by 37 CFR 1.141.

**CONCLUSION**

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

In the event the U.S. Patent and Trademark Office determines that an extension and/or other relief is required, Applicants hereby petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 50-0661** referencing **docket no. D1270-3US**. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: March 9, 2009

Respectfully submitted,

By /jenniferrisser/

Jennifer Risser

Reg. No. 60, 059

VERENIUM CORPORATION

PO BOX 910550

San Diego CA 92121-0550

direct dial: (858)526-0376

facsimile: (858)526-0876

jennifer.risser@verenum.com